

# **PPC-5010 / 5012**

6.4" Panel PC

Ver 1.0

## **USER'S MANUAL**

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# **Chapter 1 Product Information**

## **1.1 General Information**

The PPC-5010/5012, 6.4" LCD panel PC, takes advantages of modern flat-panel displays, wafer series SBC (single board computer) and power supply to ensure absolute minimum size. It is an IBM PC/AT compatible computer, specially designed for Industrial applications.

### **Embedded Board**

PPC-5010 is designed for Wafer-58xx 3.5" embedded board.

PPC-5012 is designed for Wafer-6820 3.5" embedded board.

### **LCD Display**

The PPC-5010/5012 is equipped with a high brightness 6.4" TFT LCD.

### **Power Supply**

The standard industrial panel PC; PPC-5010/5012 is equipped with an ACE-855A 55W industrial power supply. The power switch is located on the side of the unit.

### **Touch Screen (option)**

AMT Touch resistive touch screen with Penmount control board.

### **2.5" HDD**

PPC-5010/5012 is equipped with one 2.5" Drive bay. Optional 2.5" HDD or 2.5" Flash disk (IFD-250) application also available.

## 1.2 Product Specifications

- Designed for Wafer series embedded SBC.
- Disk Drive Bay: Supports one 2.5" drive bay space.
- Best solution for wall-mounted human-machine interface.
- Space for one PC/104 module.
- Cooling Fan: None (PPC-5010). One 40mm fan (PPC-5012).
- Dimensions: 200 mm x 146 mm x 95.5 mm
- LCD Display: 44-pin connector interface to wafer series SBC .

Display Model	Prime View
Type	TFT
Diagonal	6.4 inch
Brightness	300 cd/m <sup>2</sup>
Resolution	640x480 with 18 bits colors

- Supports screen reverse function.

### AMT Touch Screen (option)

Type: Analog Resistive

Resolution: Continuous

Light transmission: Typical value 80%

8-wire touch screen

Support driver: Supports DOS, Windows 3.1, 95, 98, NT, Me, 2000, WinCE.NET and Linux embedded operation systems.

### Industrial Power Supply

PPC-5010/5012 is equipped with ACE-855A, 85 ~264V AC input 55W industrial power supply. Optional power supplies: ACE-855C +24V DC input power supply or ACE-845V +12V DC input power supply.

Power consumption : 0.45 A.

### Environmental specifications

Operating Temperature : 0 ~ 40

Relative Humidity: 10-95% @40 , non-condensing

Vibration: 5 to 17 Hz, 0.1" double-amplitude displacement,  
17 to 640 Hz, 1.5 G Peak to peak.

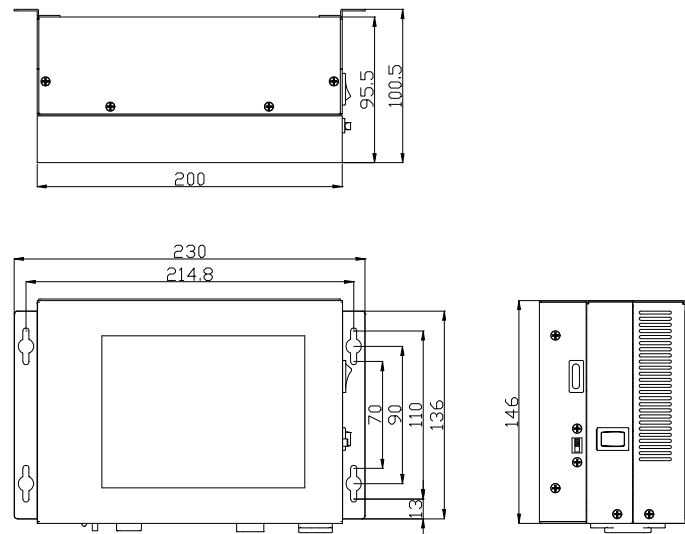
Shock: 10 G peak acceleration (11 m sec. duration)

Safety: meets UL/CSA/TUV standards

EMI: meets FCC/VDE class A standards

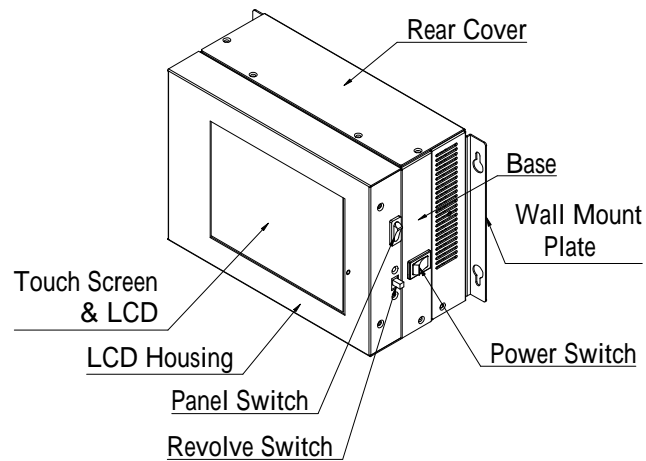
## 1.3 Dimensions

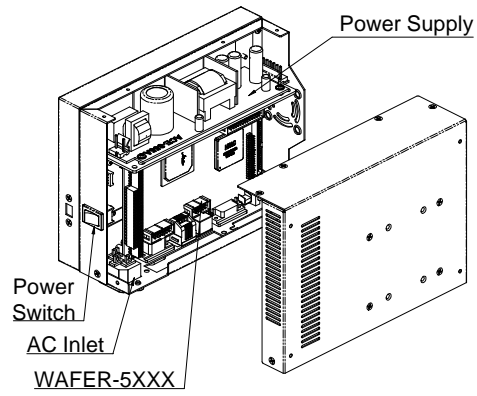
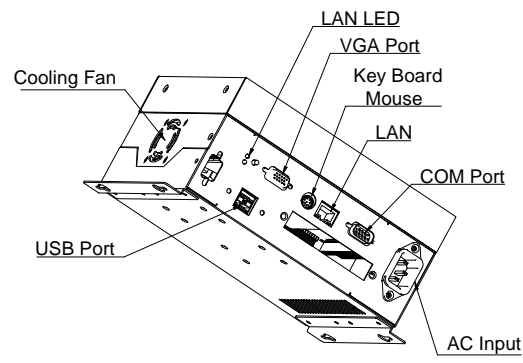
Dimensions (L x H x D): 200 mm x 146 mm x 95.5 mm



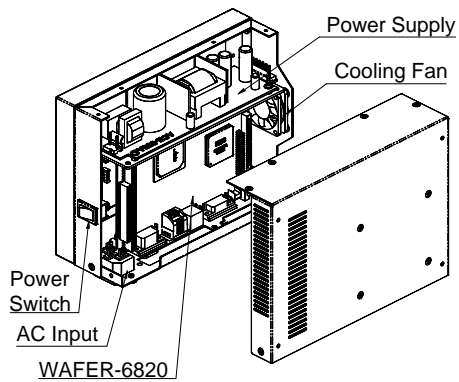
## 1.4 Indication of Components

The figures below indicate the location of all components of PPC-5010/5012 .





PPC-5010

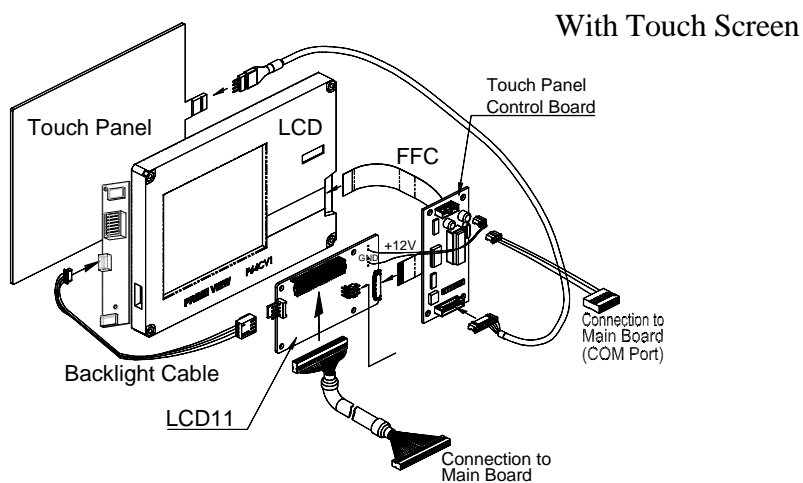
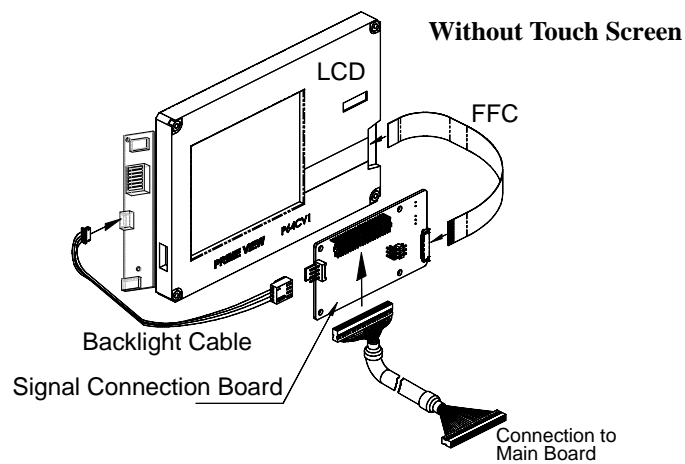
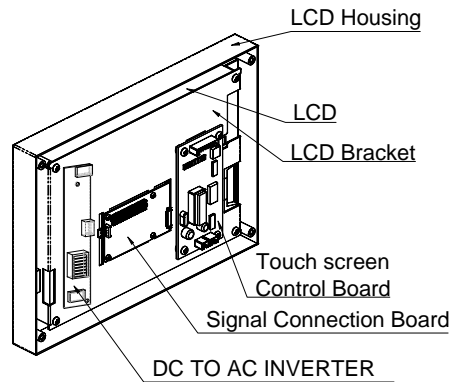


PPC-5012

## Chapter 2 System Setup

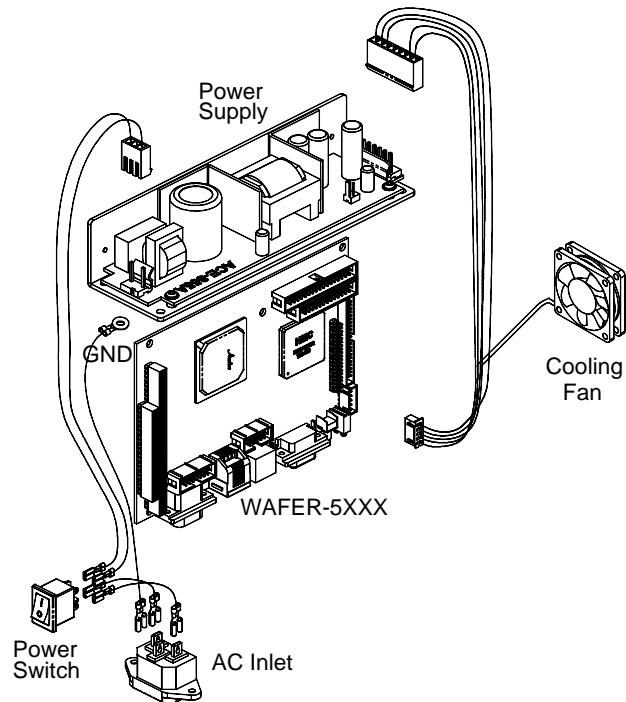
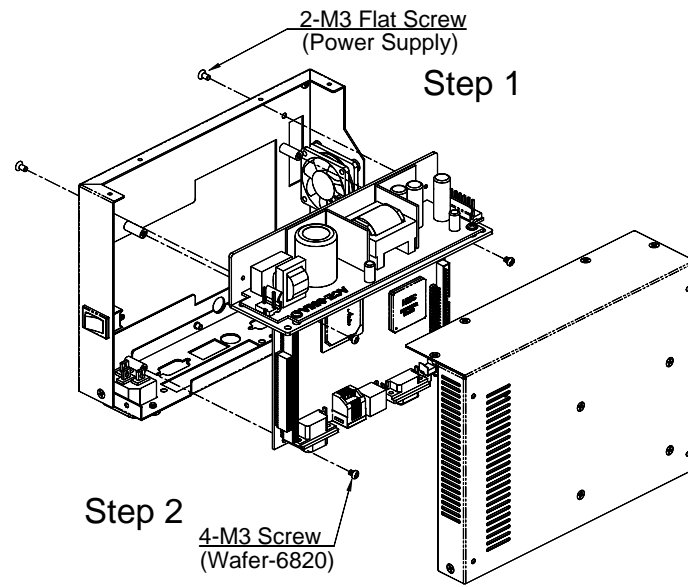
The PPC-5010/5012, 6.4" LCD Panel PC is provided completed kit for your operation. The following sections of this chapter could help your installation and maintenance.

### 2.1 LCD Module installation & connection





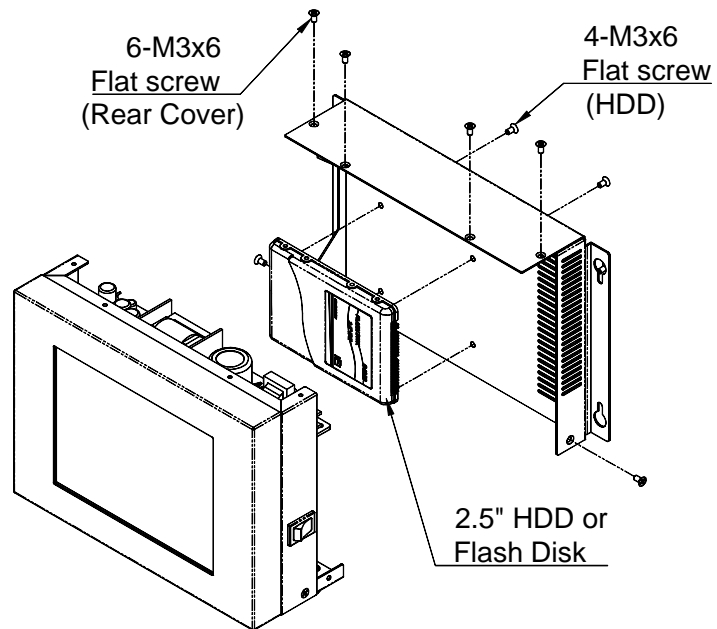
## 2.2 Wafer Board and power supply installation & connection



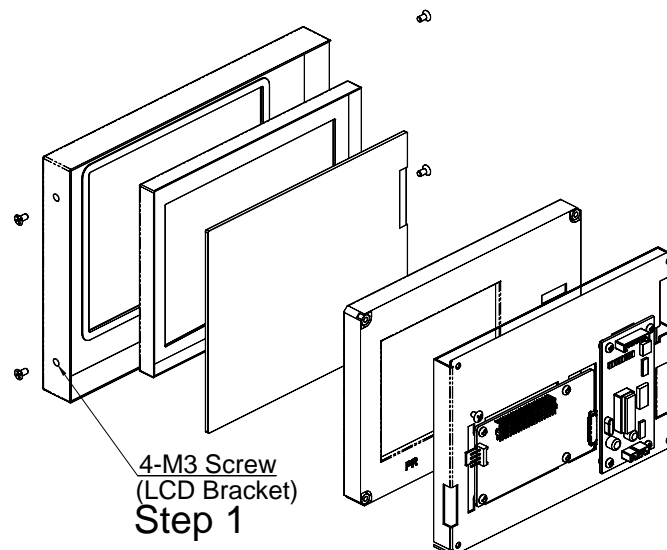
Note: Cooling Fan for PPC-5012 model only.

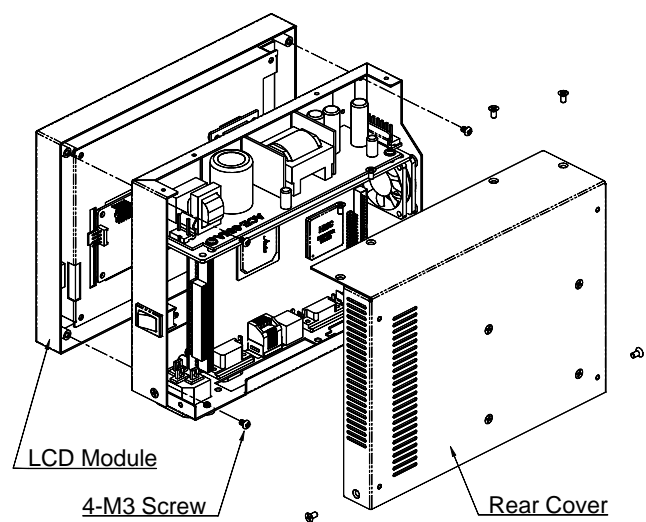
## 2.3 Disk Installation

Please refer to the following figure to install HDD or Flash disk.



## 2.4 Chassis Installation





## Chapter 3 Maintenance

There are some essential parts you need to know during the operation for the purpose of maintenance or upgrading.

### 3.1 Cards and LCD

PPC-5010/5012 is equipped with a Wafer-58xx/6820 card and 6.4" LCD panel. When removing in order to upgrade or for maintenance, you need to unfasten the screws and disconnect the interface cables. Please refer to sections 2.1, 2.2 and 2.3

### 3.2 Power Supply

PPC-5010/5012 is equipped with an ACE-855A, 55 Watt industrial power supply. When removing it for maintenance or upgrade, you will need to unfasten the screws. Please refer to the diagrams of section 2.2

**Warning: Whenever you need to remove a part for maintenance or upgrading, you should always be sure to switch off the power supply and unplug the power cord first.**

#### Specifications

Input Table:

Model	Input Voltage	Input Current
ACE-855A	85 ~264V AC, 47 ~ 63Hz	2A@115V AC or 1A@230V AC

Output Table: (at 5?°C):

Model	Rated Load		Max. Output	
	+5V	+12V	+5V	+12V
ACE-855A	8A	1.2A	10A	4A

Inrush Current (ACE-855A) :

**Not exceed 115V@30A AC or 230V AC@60A**

Ripple and Noise: Less than 1% of output voltage

Line Regulation: The line regulation for each

Outputs are less than ?1%, while measuring at rated

Loading and ?10% of input voltage changing

Load Regulation: Less than ?3%@+5V, ?5%@+12V

Efficiency: Higher than 70%

Hold-up Time (ACE-855A): 16ms (typical)@115V AC

Altitude: 0 ~ 10,000ft

Protection: Voltage surge protection.

The trip point is around 5.7V ~ 7.0V output

Vibration: 10 ~ 55Hz at 2G 3min. period, 30 min.

Along X, Y and Z axis

Impact: 10G for 20ms once on each X, Y and Z axis

MTBF: – ACE-855A: 335,874 Hours

– ACE-855C: 327,482 Hours

– ACE-845V: 339,662 Hours

Safety: Meets UL 1950; CSA 22.2 No. 234, VDE EN 60 950 standards

EMI: Meets FCC docket 20780 curve "B",

EN50081-2: CISPR curve "B" standards

EMS Standard (Designed to meet the following limits):

– EN 50082-2

– IEC 801-2 8KV (Air Discharge) criteria B

– IEC 801-3, 10V/M criteria B

– IEC 801-4, 2KV criteria B

– IEC 801-5, 2KV criteria B

Operating Temperature: -20°C~ 70°C

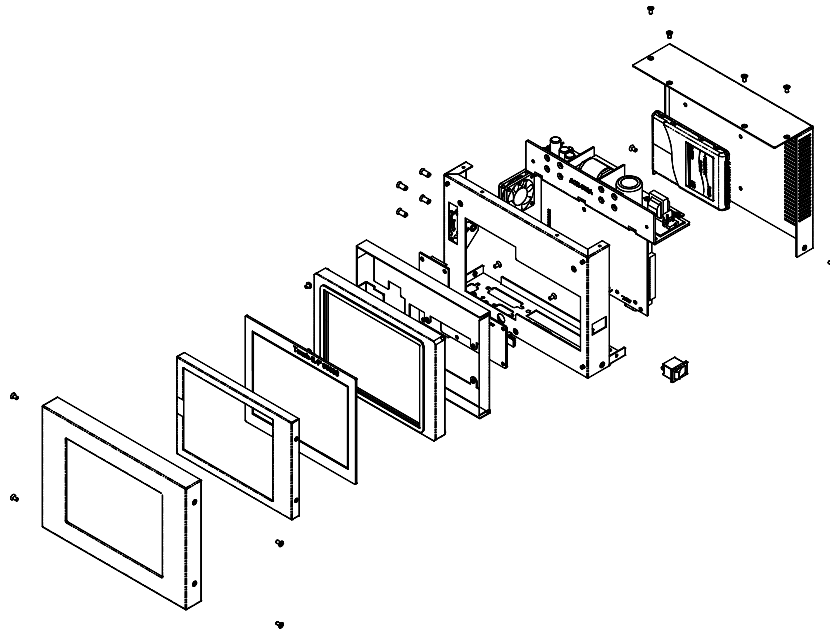
Storage Temperature: -20°C~ 85°C

Dimensions: 50.5(W) x 37(H) x 177.5(D) mm; (2" x 1.5" x 7")

### **3.3 Disk Drives**

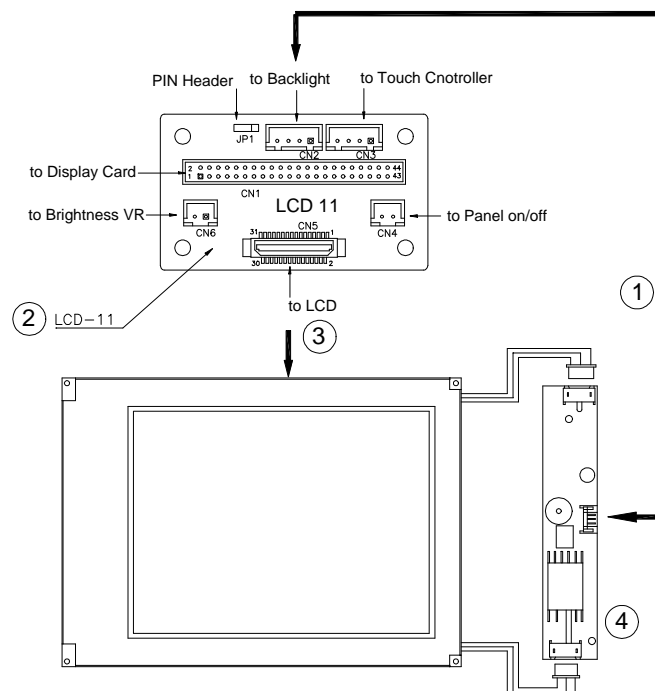
PPC-5010/5012 provides space for one 2.5" Device. The PPC-5010/5012 is most suitable to work with IEI Flash Disk IFD-250 – which is very much shock-resistant and can protect your data against vibration and high working temperatures. Or use the standard 2.5" HDD.

## Appendix A Exploded Diagram



## Appendix B Display Interface






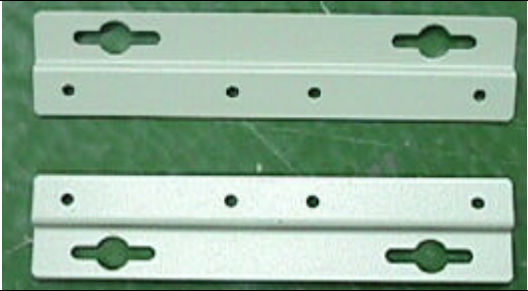
ITEM	PART NO.	DESCRIPTION	Q'TY	REMARK
1	32100-036900	Wire Cable	1	Backlight
2	131LCD11-00-020	LCD-11 Board	1	
3	32000-000048	31 Pin Cable	1	Display Signal
4	142PLCD19062-00-010	INVERTER	1	Display Model



## APPENDIX C Accessories Kit List

1. Manual
2. Screws
3. Power cable
4. Wall mount kit

Contend of Accessories kit:

	1	2
	Manual	Screw set
		 1  2  3
Q'ty	1	1.M3*6 Round with washer $\varnothing 5$ 2.M3*5 Flat $\varnothing 10$ 3.copper pillar $\varnothing 10$
	3	4
	Power cable	Wall mount
		
Q'ty	1	Wall mount Kit $\varnothing 2$